

REMARKS

Claims 1-22 and 24 were presented for examination in the present application. The instant amendment cancels claims 4 and 8 without prejudice and adds new claims 33-34. Thus, claims 1-3, 5-7, 9-22, and 24-34 are presented for consideration upon entry of the instant amendment. Claims 1, 18, and 33 are independent.

Applicants wish to thank Examiner Lewis for his time on April 22, 2010 to discuss the present application.

Independent claims 1 and 18, as well as dependent claims 2-10, 19-22, 24, and 30-32, were rejected under 35 U.S.C. §103(a) over U.S. Publication No. 2003/0104176 to Schwenk et al. (Schwenk) or U.S. Patent No. 4,290,630 to Lee (Lee). Dependent claims 11-17 and 25-29 were rejected under 35 U.S.C. §103(a) over Schwenk or Lee in further view of U.S. Patent No. 6,471,247 to Hardwick (Hardwick).

Independent claim 1 has been amended to include elements of dependent claims 4 and 8, which have been cancelled. Thus, claim 1 now recites, in part, that the at least two security elements "run substantially parallel to each other with a gap therebetween of **no greater than 10mm**", occupy "a zone that has a total cross-directional width that is **less than or equal to 14mm**", and have "**different security features**". (Emphasis added).

Applicants submit that neither Schwenk nor Lee disclose or suggest present claim 1.

Schwenk discloses a band of security paper having strip-like subareas 5a, 5b, 5c, where all of the strip-like subareas 5a, 5b, 5c are provided. The mottled fibres in the subareas can be of the same type A. See paragraph [0036]. Alternately, Schwenk

discloses that, in some embodiments, the mottled fibres arranged in the subareas differ in the luminescent characteristic to be tested. For example, the document 1a has subareas 7a, 7b, in which there are mottled fibres of the type A and B, respectively, only within the control areas 8a, 8b, whereas the document 1b is provided with subareas 7a, 7b having mottled fibres A, D only in the control areas 8a, 8d. See paragraph [0037].

Applicants respectfully submit that to the extent that the mottled fibres of Schwenk have **different security features**, Schwenk fails to disclose or suggest that these mottled fibers run substantially parallel to each other with a gap therebetween of **no greater than 10mm** or occupy a zone that has a total cross-directional width that is **less than or equal to 14mm** as now recited by claim 1.

Accordingly, Schwenk fails to disclose or suggest present claim 1.

Applicants maintain that Lee merely discloses the different shapes of a **single thread** that can be used, but there is no disclosure of **more than one thread in a single document**.

The Office Action maintains that the following portion of Lee supports the interpretation that Lee discloses multiple threads in a single document:

"The threads_s 2, after separation, may be cut into suitable lengths which **are** then inserted into or affixed to the surface of the sheet material of the documents_s concerned (emphasis added)." See col. 3, lines 48-51.

Specifically, the Office Action asserts that the use of the plural "threads_s" and the corresponding verb "**are**" support the position that Lee discloses placing more than one thread into one document.

Applicants disagree. Rather, Applicants submit that such an assertion ignores

the plain language of the particular sentence, as well as the entirety of the disclosure by Lee. Rather than the strained interpretation of Lee offered by the Office Action, Applicants maintain that the use of the plural "threads" and "**are**" are merely used to conform these terms to the fact that this sentence is directed to multiple "documents" and not to multiple threads within a single document.

In Lee, Figures 5 to 8 all show examples of a banknote and each of these embodiments contain only a single thread 2, which has different edge shapings on either side. However, none of the embodiments disclosed or suggested by Lee includes at least two elongate security elements as recited by present claim 1.

Furthermore, independent claim 1 recites, in part, that the at least two elongate security elements run "**substantially parallel** to each other with a gap therebetween of **no greater than 10mm**", and occupy along with the gap "a zone that has a total cross-directional width that is **less than or equal to 14mm**" (emphasis added).

Even if one were to assume that Lee discloses what the Office Action asserts (i.e., more than one thread in a single document), there is simply no teaching or suggestion that these alleged multiple threads are **substantially parallel** to each other, have the required **gap** therebetween, or occupy the **zone** as recited by claim 1.

Also, present claim 1 now recites that the "at least two security elements have **different security features** (emphasis added)." There is also simply no teaching or suggestion in Lee that these alleged multiple threads have **different security features** as recited by present claim 1.

Accordingly, Lee fails to disclose or suggest present claim 1.

With regard to the claimed dimensions of the width, gap, and zone, the Office

Action acknowledges that Schwenk and Lee fail to disclose these ranges. Rather, the Office Action asserts that the claimed ranges would be obvious to those skilled in the art.

Applicants respectfully traverse this assertion.

The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). See also *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1734 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”)

Applicants respectfully submit that the Office Action has failed to meet its burden of establishing a *prima facie* case of obviousness because the Office Action has failed to determine the level of skill in the art. Accordingly, the Office Action has failed to establish the underlying factual determinations as to the level of skill in the art such that the conclusion that the ranges would be obvious to such a person is clearly unfounded.

Further, the Office Action has presented no line of reasoning, and we know of none, as to who one skilled in the art is or why that person viewing the collective teachings of Schwenk and Lee would have found it obvious to selectively pick and choose various **widths, gaps, and zones** to arrive at the claimed invention. Rather, Applicants submit that the unsubstantiated conclusions of the Office Action support the inescapable conclusion that the Office Action has simply pieced the references together to support a rejection on the basis of hindsight.

Furthermore, Applicants submit that the claimed combination does much more than yield predictable results. The present application discloses that:

It has been found that, by placing two discrete security elements in close proximity within a document provides significant public security benefits over wide, twisted, braided or woven security element constructions. Surprisingly when two or more security elements are placed side by side they dramatically increase the overall visual impact of the security elements compared to having a single security element, even if that single security element is as wide as the combined width of the security elements in close proximity to one another. See page 4, lines 14-22.

Thus, the claimed widths, gaps, and zones have been very carefully selected to provide the intended visual impact, where the cited art fails to recognize these variables as being necessary for such an unexpected result.

"The law is replete with cases in which the difference between the claimed invention and the prior art is some range or other variable within the claims. . . . In such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range." *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). Applicant can rebut a presumption of obviousness based on a claimed invention that falls within a prior art range by showing "that there are new and unexpected results relative to the prior art." *Iron Grip Barbell Co., Inc. v. USA Sports, Inc.*, 392 F.3d 1317, 1322, 73 USPQ2d 1225, 1228 (Fed. Cir. 2004).

Applicants maintain that the unpredictable results provided by the claimed combination of the width, gap, and zone is simply not disclosed or suggested by either Schwenk or Lee.

The Office Action fails to assert that Hardwick cures the aforementioned and other deficiencies present in Schwenk and Lee.

Accordingly, Applicants submit that claim 1, as well as claims 2-17, 19-23, and 25-29 that depend therefrom, are allowable over the proposed combination of cited art. Reconsideration and withdrawal of the rejection to claims 1-17, 19-23, and 25-29 are respectfully requested.

Independent claim 18 has been amended to recite "at least two elongate **security threads** (emphasis added)".

Schwenk fails to disclose or suggest security threads. Schwenk discloses mottled fibers, which are short plastic or cotton fibers. These fibers can be twisted or interwoven to form security threads. See paragraphs [0002]-[0004]. Thus, Schwenk itself recognizes the difference between mottled fibers and security threads.

Instead of disclosing security threads generally, or even security threads formed by interwoven mottled fibers, Schwenk specifically discloses that security threads formed by twisted or interwoven mottled fibers, while providing an excellent visual authenticity feature, are not well suited for machine authenticity testing because the luminescence of the individual fibers is too low. Id.

Thus, Schwenk not only recognizes the difference between mottled fibers and security threads, but teaches away from the use of security threads in order to allow for machine authenticity testing.

Accordingly, Schwenk fails to disclose or suggest present claim 18.

Claim 18 also recites that the at least two elongate security threads each have "a width of less than or equal to 6mm", "run substantially parallel to each other with a gap therebetween of no greater than 10mm", and "occupy a zone that has a total cross-directional width that is less than or equal to 18mm".

Applicants maintain that Lee merely discloses the different shapes of a **single thread** that can be used, but there is no disclosure of **more than one thread in a single document**.

Further, and even if one were to assume that Lee discloses what the Office Action asserts (i.e., more than one thread in a single document), there is simply no teaching or suggestion that these alleged multiple threads are **substantially parallel** to each other, have the required **width, gap** therebetween, or occupy the **zone** as recited by claim 18.

Accordingly, Lee fails to disclose or suggest present claim 18.

As discussed in detail above with respect to claim 1 with regard to the claimed dimensions of the width, gap, and zone, Applicants submit that the claimed combination does much more than yield predictable results. Here, the claimed widths, gaps, and zones have been very carefully selected to provide the intended visual impact, where the cited art fails to recognize these variables as being necessary for such an unexpected result.

Applicants maintain that the unpredictable results provided by the claimed combination of the width, gap, and zone is simply not disclosed or suggested by either Schwenk or Lee.

The Office Action fails to assert that Hardwick cures the aforementioned and other deficiencies present in Schwenk and Lee.

Accordingly, Applicants submit that claim 18, as well as claims 24 and 30-32 that depend therefrom, are allowable over the proposed combination of cited art. Reconsideration and withdrawal of the rejection to claims 18, 24, and 30-32 are

respectfully requested.

Claims 33 and 34 have been added to point out various aspects of the present application. Applicants specifically point out that new claims 33 and 34 are not intended to be limited to the specific mechanisms of patentability previously argued with respect to any prior claims in this or any related applications. Accordingly, Applicants hereby rescind any disclaimer of claim scope and, thus, any prior art for which such a disclaimer was made to avoid may need to be revisited by the Examiner with respect to claims 33 and 34.

It is believed that claims 33 and 34 are in condition for allowance. For example, claim 33 recites, but the cited art fails to disclose or suggest "**first and second elongate security threads** running substantially parallel to each other **within said zone** with **a gap therebetween of no greater than 10mm**" with first and second security features that have "a **difference**".

The cited art fails to disclose or suggest elongated **security threads** in a zone of the claimed dimension or with the claimed gap. Again, Schwenk merely discloses mottled fibers, but it is clear that these mottled fibers are not a security thread and are not substantially parallel to one another within the specified gap or zone. Also, the single thread of Lee, or to the extent one reads Lee to include two threads, are not substantially parallel to one another within the specified gap or zone.

Claim 34 is allowable for at least the reason that it depends from claim 33. Further, claim 34 requires that the difference between the first and second security feature be selected from the group consisting of "opposing holographic movement effects, mutually opposed holographic image replay, different information, different viewing angles, different visual impression, different thermochromic transition temperatures, different colourshift features, and opposed colour switch features",

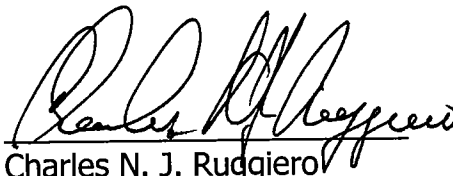
where such differences are not disclosed or suggested by the cited art.

In view of the above, it is respectfully submitted that the present application is in condition for allowance. Such action is solicited.

If for any reason the Examiner feels that consultation with Applicants' attorney would be helpful in the advancement of the prosecution, the Examiner is invited to call the telephone number below.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Charles N. J. Ruggiero", is written over a horizontal line.

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